	Application No.	Applicant(s)
Notice of Allowability	10/666,181 Examiner	IOI, TOSHIAKI Art Unit
	Examiner	Art Onit
	Tony Ko	2878
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to		
2. The allowed claim(s) is/are <u>1-7</u> .		*
3. ☑ The drawings filed on <u>9/19/03</u> are accepted by the Examiner.		
 4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some* c) None of the: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements		
noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached		
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date		
(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
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Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. ☐ Notice of Informal P	atent Application (PTO-152)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summary	, , , , , , , , , , , , , , , , , , , ,
3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/C Paper No./Mail Date 9/19/03	Paper No./Mail Dat	ie
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material 4. September 1985 4. Septe	 8. ☑ Examiner's Stateme 9. ☐ Other 	ent of Reasons for Allowance
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DETAILED ACTION

Allowable Subject Matter

- 1. Claims 1-7 are allowed.
- 2. The following is an examiner's statement of reasons for allowance: Prior art does not disclose a second phase detector having a second detecting section for detecting a phase of the object in a phase different from said first phase detector and a second binarization section for binarizing the phase that said second detecting section has detected by setting the hysteresis. Prior art does not disclose a power supply section having intermittent energized mode.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,351,154 discloses a phase detector including a voltage controlled oscillator generating a voltage controlled oscillator output and some logic state device for receiving said voltage controlled oscillator output as an input.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Ko whose telephone number is 571-272-1926.

The examiner can normally be reached on Monday-Friday 7:30 - 4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TKO

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800